

# VISTA

## FLIGHTMATIC

### SINGLE AND TWIN FLIGHT TRAINERS

GENERAL AVIATION'S ONLY VISUAL AND INSTRUMENT  
TRAINER/SIMULATORS, FEATURING—

- Panoramic Projection
- Primary Flight, Ground Reference, Full Instruments
- Emergency Procedures Training
- Fully Automatic Solo Flight
- At General Aviation Prices



**FLIGHTMATIC, INC.**

"Specialists in Aviation Training Devices"

Teterboro Airport  
Teterboro, New Jersey 07608 • (201) 933-5134

VISTA SINGLE  
type F 207A\* DUPLICATES  
CHEROKEE 140 PANEL  
AND PERFORMANCE  
CHARACTERISTICS



*Shown in VFR mode with panoramic projection.  
\* Optional 2nd NAV/COM & VOR Indicator*

**VFR BASIC VISUAL—** VISTA simulators, for the first time, bring the realism of panoramic projection into general aviation flight training. A special visual flight projector reacts precisely and realistically to aircraft controls. Your students can duplicate and practice every VFR flight maneuver... climbs, descents, glides, rectangles, turns, stalls, touch-and-go's... all with true reference to ground. A flight pattern reference chart can be placed in front of the student, showing traffic patterns, S-turns, or any other pattern you wish to create. Panoramic projection can be superimposed easily over these ground reference patterns by a flip of the switch.

#### REALISTIC GROUND TRAINING

VISTA's are the only general aviation-level trainers offering the total realism of visual flight simulation. Panoramic projection adds an exciting new dimension to student training not available in any other comparably priced equipment. Attitude changes are "seen out the window", just as they would be in the aircraft. Panel instruments and visual horizon automatically show all the effects of rudder, aileron and elevator movements. There's even realistic engine sound which responds smoothly and accurately to throttle changes and prop speed-up effects.

VISTA SINGLE  
type F 206A\* DUPLICATES  
CESSNA 150 PANEL  
AND PERFORMANCE  
CHARACTERISTICS



*Shown in IFR mode with Position Indicator illuminated.  
\* Optional 2nd NAV/COM & VOR Indicator*

**IFR RADIO NAVIGATION—** All Flightmatic Trainers have a unique, airplane-shaped Position Light to show the student what's happening as he intercepts, tracks, holds and maneuvers. The Position Light appears on a plotting board above the instrument panel and shows the exact position and heading visualization required for instrument flight. An IFR film strip can be projected to simulate IFR environment. A complete package of avionics permits teaching and practice of virtually every type of instrument approach and procedure. A plotting board monitors the student's progress via an automatic inked stylus. This map display becomes a permanent part of the student's progress record.

#### SAFER, MORE EFFECTIVE

VISTA Flight simulators provide a ground training atmosphere geared as closely as possible to the true flight experience. Your students learn on a VISTA 206 or 207, for example, then confidently advance to flight lessons in a Cessna 150 or Cherokee 140 with the same panel configuration and controls. The instruments they use, what they see and feel... bank power, slip & skids, stall functions... are all familiar. The result, rapid progress by the student toward a safe solo flight and eventual certification. All single and twin models incorporate provisions for emergency procedures training.

VISTA TWIN  
type F 208 FOR ADVANCED  
STUDENTS, TWIN  
TRANSITION, CURRENCY  
REQUIREMENTS



*Converts instantly to a single engine, constant speed,  
retractable gear, high-performance aircraft.*



# SPECIFICATIONS

INSTRUMENTS, CONTROLS & FACILITIES	EQUIPMENT TYPE			
	Cessna 150 F206	F206A	Piper 140 F207	Twin F208
Attitude-Gyro Indicator	X	X	X	X
Directional-Gyro Indicator	X	X	X	X
Altimeter	X	X	X	X
Vertical Speed Indicator	X	X	X	X
Airspeed Indicator	X	X	X	X
Turn Coordinator	X	X	X	X
Turn & Bank Indicator	—	—	—	X
Compass	X	X	X	X
Aircraft Clock	X	X	X	X
Recording Time Meter	X	X	X	X
Tachometer	X	X	X	X
Manifold Pressure Indicator	—	—	—	Dual
Fuel Flow Indicator	2	2	X	Dual
Fuel Quantity Indicator	2	2	2	2
Suction Indicator	X	X	X	X
Alternator Ammeter	—	—	X	2
Cylinder Head Temp. Ind.	—	—	—	2
Oil Temperature Indicator	X	X	X	2
Oil Pressure Indicator	X	X	X	2
Flap Position Indicator	X	X	detent	detent
Gear Position Indicator	—	—	—	X
ADF Bearing Indicator	X	X	X	X
ADF-RMI Ind. (Optional)	X	X	X	X
VOR/ILS Indicator	X	X	X	X
VOR Bearing Indicator	—	X	—	X
NAV/COM Radio No. 1	X	X	X	X
NAV/COM Radio No. 2	—	X	—	X
ATC Transponder	X	X	X	X
DME Miles Indicator	X	X	X	X
Stall Warner	X	X	X	X
Stall Warning Light	—	—	X	X
MKR BCN On/Off/Volume	X	X	X	X
MKR BCN Indicators	X	X	X	X
OPERATIONAL CONTROLS				
Control Yoke	X	X	X	X
Elevator Trim	X	X	X	X
Rudder Pedals	X	X	X	X
Rudder Trim	—	—	—	X
Parking Brake	X	X	X	X
Flap Control	Sw.	Sw.	lever	lever
Gear Switch	—	—	—	X
Carburetor Heat Control	X	X	X	X
Master Switch	X	X	X	X
Ignition Switch	X	X	X	4
Starter Switch	Ign.	Ign.	Ign.	Ign.
Throttle Control	X	X	X	dua.l
Propeller Pitch & Feather	—	—	—	Dual
Mixture Control	X	X	X	X
Fuel Selector Switch	—	—	X	2
Cowl Switch	—	—	—	2
Fuel Pump Switch	—	—	X	2
Alternator Switch	—	—	X	2
EQUIPMENT CONTROLS				
Chart Position Ind. Sw.	X	X	X	X
Attitude Display Switch	X	X	X	X
Chart Drive Switch	X	X	X	X
Engine Sound Off/On/Vol.	X	X	X	X
Key Switch & Indicator Light	X	X	X	X
INSTRUCTOR CONTROLS				
Wind Velocity Control	X	X	X	X
Wind Direction Control	X	X	X	X
Fuel Quantity Control	X	X	X	X
Gyro Suction Fail	X	X	X	X
Oil Temp./Pressure Fail	X	X	X	2
Engine Fail	X	X	X	2
Mains Fuel/Auto. Depletion	—	—	—	2
Aux. Fuel/Auto-Depletion	—	—	—	2
VOR/LOC Fail	X	X	X	X
DME Fail	X	X	X	X
ADF Fail	X	X	X	X
MKR BCN Fail	X	X	X	X
Twin/Single Op. Switch	—	—	—	X
Intercom	—	—	—	X

NAVAID FACILITIES					
Plotting Chart	Dual charts with illuminated position indicator for student and inked stylus for instructor, with airways, intersections, holding patterns, 600 sq. mile area.				
VHF Omni-Range	(2) VOR Stations; Northport (Nor 109.00) Southport (Sou 112.4), (1) VORTAC				
Non-Directional Beacon	Outer compass locator station				
Instrument Landing System	ILS Localizer course and glideslope, 3° slope (IHPE 110.1)				
Marker Beacons	Outer and middle marker beacon on the ILS course				
ACCESSORIES SUPPLIED					
Microphone	1	1	1	1	2
Headset	—	—	—	—	2
VFR Film	1	1	1	1	1
IFR/Day Film	1	1	1	1	1
Night Film	1	1	1	1	1
Screen Airways Cht. Grnd. Ref.	1	1	1	1	1
Screen ADF	1	1	1	1	1
Screen Blank	1	1	1	1	1
Approach Plates-Set	1	1	1	1	1
Navigation Charts	50	50	50	50	50
Recording Pens(Asst'd Colors)	10	10	10	10	10
Maintenance-Opr. Manual	1	1	1	1	1

PERFORMANCE CHARACTERISTICS										
EQUIP. TYPE		F206 (CESSNA)			F207 (PIPER)			F208 (TWIN)		
		RPM	%BHP	TAS-MPH	RPM	%BHP	TAS-MPH	RPM	%BHP	TAS-MPH
Cruise Performance 2500 ft.		2750	92	121	2650	90	136	2700	90	205
		2700	87	119	2525	80	128	2400	90	198
		2600	77	114	2450	75	124	2400	85	195
		2500	68	108	2375	70	120	2400	75	188
		2400	60	103	2325	65	116	2200	75	182
		2300	53	96	2250	60	112	2300	65	173
		2200	46	89	2175	55	107	2300	55	168
		2100	40	79	2120	50	102	2300	45	140
Maximum Rate of Climb		R/C-FPM IAS-MPH			R/C-FPM IAS-MPH			R/C-FPM IAS-MPH		
		670 76			670 85			1400 112		
Maximum Glide Flaps Up Windmilling Propeller		FT/MILE IAS-MPH			FT/MILE IAS-MPH			FT/MILE IAS-MPH		
		600 70			510 83			1200 89		
Stall Speeds CAS-MPH Power Off	FLAPS		UP	40°	UP		40°	UP		40°
	Angle of Bank	0°	55	48	64	55	76	69		
		20°	57	49	66	57	79	71		
		40°	63	54	73	63	89	79		
		60°	78	67	91	78	109	97		
VMC-90 IAS-MPH										

EQUIPMENT SPECIFICATIONS			
CHARACTERISTIC	SPECIFICATIONS		
	F206	F207	F208
Power Requirements	115V, 50-60 Hz, single phase, 450 watts,		
Overall Size	59" L x 40" W x 62" H		
Weight, Lbs.	400	415	430
Crated Size	64" L x 45" W x 67 1/2" H		
Crated Weight, Lbs.	540	555	570
Operating Temperature	-10°C to 60°C		
Storage Temperature	-25°C to 70°C		
Humidity Range	0 to 90% relative humidity at 32°C		
Control Yoke Travel	Pitch Axis: 5 1/2", Roll Axis: 60° L&R		
Attitude Gyro Limits	Pitch: ±15° Bank: 60° L&R		
Attitude Display Limits	Pitch: ±15° Bank: 60° L&R, Turn Rate: 8°/sec. max.		
Directional Gyro Turn Rate			
Altimeter	0-10,000 Feet, 2-pointer, 1500 fpm max rate		
Navigation Chart Area	600 sq. miles, 1 inch = 1 nautical mile		
Wind Direction & Velocity	Varied through 360°, 0 to 40 knots		
NAVAID Sensitivity	VOR: ±10° F.S., C.D.I., LOC: ±2.5° F.S., G/S: ±50 ft. 2-dot deflection.		
NAV/COM Radio	ARC 300 KING KX-175 KING KX 175		

# TEACHING CAPABILITIES

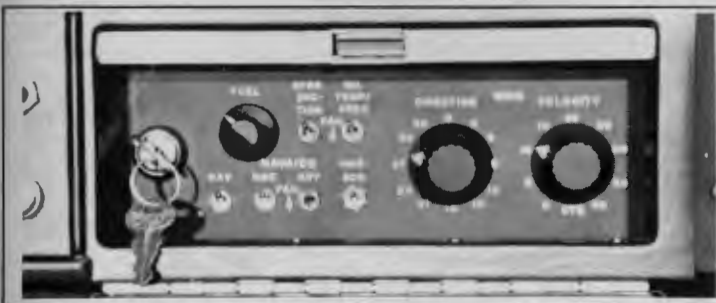
VFR	GROUND REFERENCE	IFR
Instrument & Control Functions	Wind Effect Crab Angles Traffic Patterns	Attitude Instrument Flight
Airplane Familiarization	Rectangular Patterns Eights on Pylons Chandelles	Communications
Take-Offs Landings	"S" Turns Across Road	ATC Procedures
Straight & Level Normal Turns	Turn-About-A-Point Forced Landings	VOR VORTAC
Steep Turns	Touch-N-Go	ADF (LOM) MARKER BEACONS
Climbs		ILS LOCALIZER
Glides		DME DME
Slow Flight		
Slips		
Stalls & Accel. Stalls		
Attitude Flight		
Flaps		
Partial Panel		
Solo Practice	Solo Practice	Solo Practice
Flight Path Recorder	Flight Path Recorder	Flight Path Recorder
Projected Attitude (VFR, IFR, Night)	Projected Attitude (VFR, IFR, Night)	Projected Attitude (VFR, IFR, Night)

## STANDARD FEATURES

- NAV Chart Position Indicator—Heading Slaved to D-G
- Attitude Display System—Pitch, Bank & Turn Slaved to AGI & D-G
- Flight "Freeze" Capability

## EMERGENCY PROCEDURES

Singles & Twin:	Twin Only:
Engine Out	Single Engine Procedure (Engine Out)
Oil Temperature/Pressure Failure	VMC Effects
Gyro Suction Failure	Mains Fuel/Auto-depletion
VOR/LOC Failure	AUX Fuel/Auto-depletion
ADF Failure	Communications
MKR/BCN Failure	Engine Synchronization
DME Failure	
Fuel Management	



# ECONOMY OF VISTA

## "A LOW INVESTMENT — A HIGH RETURN"

VISTA singles and twin are the only visual and instrument flight trainer/simulators available in general aviation *at general aviation prices*. Designed to assure a high return on investment in student flight training operations, VISTA's offer these attractive advantages:

- ☐ Low Cost of Operation
- ☐ Minimum Use of Floor Space
- ☐ Require No Special Instructor Training
- ☐ High Reliability Solid-State Components
- ☐ Simple Plug-in Installation
- ☐ Fit Through any Standard 30" Door
- ☐ Total Training Realism and Efficiency
- ☐ Automatic Solo by Student
- ☐ Fully Guaranteed (see Below)

## — WARRANTY —

*VISTA Flight Trainers are guaranteed by Flightmatic, Incorporated, against defects in materials and workmanship. Parts and replacement service will be supplied at no charge for a period of ninety (90) days from date of delivery. All parts are fully guaranteed for a period of two (2) years from date of delivery. Guarantees do not apply to equipment improperly handled or operated in excess of specified limits.*